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AUTHOR Pinson, Nancy
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ABSTRACT

This document is a collection of forms, questionnaires, materials, and reports from two summer workshops attended by 50 educators and counselors at the University of Maryland. Career exploration questionnaires, progress reports on 13 career exploration workshops, career exploration 1971 goals and objectives, resource materials, and a team research form are followed by the document's major section: Each of four worlds--the human world, technological world, aesthetic world, and natural world--is related to classroom activities (e.g., have a State trooper visit the classroom) and to potential careers (policeman, crossing guard, security guard, etc.). A career exploration plan (to change attitudes toward work), career education in home economics and in industrial arts, and a high school career exploration workship follow. (NH)

ED 096485

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SAMPLE PRODUCTS, TESTS, MATERIALS UTILIZED IN MIDDLE SCHOOL/JR. HIGH COMPONENT OF THE MARYLAND CAREER DEVELOPMENT PROJECT

SUMMER, 1971

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CE002097

Nancy Pinson, Specialist in Pre-Vocational Education
and Career Development
Maryland State Department of Education
P.O. Box 8717
Friendship International Airport
Baltimore, Maryland 21240

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JAMES A. SENSENBAUGH
STATE SUPERINTENDENT

MARYLAND STATE DEPARTMENT OF EDUCATION
600 WYNDHURST AVENUE, BALTIMORE 21210

CAREER EXPLORATION WORKSHOPS FOR JUNIOR HIGH SCHOOL COUNSELORS AND EDUCATORS

Summer, 1971 ...a Maryland Career Development Project component

To remove the artificial barriers between school disciplines, to implement a team approach, and to explore the broad range of career identifications to which their students might one day aspire...these are the challenges faced by more than fifty educators and counselors in two summer workshops held on the campus of the University of Maryland.

During this second summer of workshop experience, team membership grew from 1970's original nucleus: the counselor, the home economics teacher, and the industrial arts teacher, to include the mathematics teacher and the free choice of the applicant school. Participants immediately engaged in concrete, role-playing experiences demonstrating each discipline's application to nine broad career areas and to effective mergers within existing curriculum. Such mergers were exemplified as each discipline area was able to effectively house activities which stressed both the need for basic skills and their relationships to common traits of employability. Participants were directly involved with people at work as they researched six roles they assumed. Among them were:

an assembly line worker
a family member's division of labor
a consumer of goods or services
a small business entrepreneur
a creator of goods and services
an educator validating education

These experiences, permitting educators and counselors to value one another's expertise, as well as to become aware of the career alternatives their students

be able to examine, resulted in custom-made plans which will be operational in a total of fifteen schools by the fall of 1971. The activities and strategies employed by each team in the home school setting will be observed and evaluated by the workshop staff during the school year. Continuing assistance of state, county, university, local, and business personnel has been assured in the recognition of education's need to strengthen its relationship with all areas impacting upon the lives of the students it serves.

GUIDELINES FOR CAREER DEVELOPMENT.....setting oriented

JUNIOR HIGH AND MIDDLE SCHOOL OUTCOME: The student will be able to demonstrate a broad awareness of the career alternatives which will someday be available to him

GOAL STATEMENTS:

1. Provide opportunities for independent study, problem-solving, aptitude testing, through the utilization of community as laboratory.

2. Continue to emphasize transferable worker-personality characteristics which are applicable within and across occupational areas.

3. Coordinate curriculum areas so as to support the concept of interrelatedness between educational and vocational competencies.

4. Encourage the student to link his avocational or extra-curricular interests with his own designation of the kind of adult he will someday be.

5. Assist the student to evaluate his preferences in terms of real experiences with people, data, and things. Support and provide for experiences which permit him to make changes in his assessment if he wishes them.

6. Continue the provision of first-hand contact with people who work while supplementing these experiences through media (television, test, etc.) which can widen the range of possible career identification.

7. Provide concrete, manipulatory activities in all learning settings which can provide the basis for the student's conceptualization of himself in future roles. Build the capacity for abstract thought on such concrete experiences.

8. Encourage the refinement of decision-making skills through role-playing activities, reporting of decision points in student's or parent's lives, accurate observation to date of people at work, work histories of older siblings and friends, etc.

9. Support the student who desires part-time work experience after school through activities permitting him to share these experiences with his classmates.

10. Prepare students for their next decision point by "forecasting" the need for each child to make as accurate a self-assessment as possible before election of future courses of study.

NOTE: Quantifiable objectives, stated in behavioral terms, are best designed by those local units who must implement them.

PRE-POST OPINIONNAIRE

CONCERNS ABOUT CAREER EXPLORATION	AGREE	DISAGREE	NOT SURE	
1. Attitudes and values are more affected by early life experiences than by school experiences.				
2. Interests expressed by ten year olds are of minor importance when designing curriculum.				
3. The elementary school is not equipped to develop decision-making abilities.				
4. It is easier to work with an adolescent who has made an early career choice than with one who has made no commitment.				
5. Interests can be explored before vocational maturity is reached.				
6. Career Exploration should be given little emphasis until the child reaches adolescence.				
7. Exposure to many career alternatives serves only to confuse the elementary school child.				
8. Positive attitudes toward work do exist in, but are often and subsequently trained out of our children as early as the second grade.				
9. The skill training offered to a student should be based primarily on the results of aptitude tests administered to him.				
10. Teachers of vocational subjects tend to isolate, as well as be isolated by, teachers unversed in vocational education.				
11. The majority of parents and the business community are eager to become involved in the educational process.				
12. The majority of school personnel will individually admit, but collectively deny, the irrelevance of much of today's curriculum.				
13. Vocational training should be postponed until after high school.				

by Nancy M. Pinson, Md State Dept of Education

CONCERNS ABOUT CAREER EXPLORATION	AGREE	DISAGREE	NOT SURE	
14. Vocational education is one phase of career development.				
15. Career development is a process where the pupil is exposed to the work components of his career choice.				
16. Children can be introduced in the elementary grades to ideas about working for a living and to realities of wage earning.				
17. An occupational commitment should be implicit in every students' secondary school program.				
18. The regular classroom teacher is unable to provide each pupil with occupational and career information while teaching subject matter.				
19. Career development is one component of vocational education.				
20. The cost of training students in career entry skills should not be borne by the public school system.				
21. The information provided in traditional college preparatory courses can be applied to more occupations than can the information available in career oriented curriculum.				
22. Career education in rural areas is more important than career education in urban areas.				
23. Only those students who declare themselves to be work-oriented need exposure to the career development approach.				
24. Parents with college educations are less apt to support curriculum stressing employability than are parents whose working careers began after high school.				
25. Only when a total school approach and curriculum reflect future career applications in all subjects will young people attribute status to the acquisition of a salable skill.				

As a professional educator, my primary concerns are with:
(Re-number according to your priority ranking)

_____1. development of a salable skill.

_____2. matching of known aptitudes with jobs demanding them.

_____3. achievement of technological currency.

_____4. meeting individual needs as they become apparent.

_____5. vocational awareness for all students: K-12

_____6. raising professional standards in my field.

_____7. creating more valid measures of skill attainment.

_____8. achievement of equal status with other disciplines

_____9. teaming my proficiencies with those of other disciplines in an effort to validate education.

_____10. _____

_____

_____

CAREER DEVELOPMENT IS...(Check one or write your own one-liner)

_____ a vocational course offering in a comprehensive high school

_____ a response to the manpower needs of the future

_____ a progression through apprenticeship to certification

_____ a school and community assisted process of reality-testing

_____ occupational orientation in a vocational-technical school

_____ achieved at the moment of job entry

_____ an ongoing educational process that starts at birth and continues until death

_____ (other) _____

_____

POST TEST ASSESSING IN-SERVICE EXPERIENCES

ITEMS TESTING OBJECTIVES FOR WORKSHOP (Summer, 1971)

1. Name one skill needed in affective, cognitive, and motor areas for each of the occupations listed below:

	affective (feeling)	cognitive (thinking)	motor (physical)
a. farm machinery salesman			
b. television cameraman			
c. bricklayer			
d. X-ray technician			
e. assembly line worker			
f. tour guide			
g. bank teller			
h. social worker			
i. truck driver			

2. Using your subject matter as a basis, briefly describe three ways you could incorporate work-simulation experiences for your students. (You may assume resource help, a change in setting, and "unlimited" equipment.)

a. _____

_____

b. _____

_____

c. _____

_____

by Nancy M. Pinson, Md State Dept of Education

3. Give one explicit connection between your discipline area and those represented by the four other areas on your team (If your team played "short" assume that your team met the five content area criteria).

   1. _____

   2. _____

   3. _____

   4. _____

4. Name two parents _____ (field) _____

   _____ (field) _____

   two local businessmen _____ (product or service) _____

   _____ (product or service) _____

   two staff members of a community college _____ (describe function)

   _____ (describe function)

   two county-level personnel _____ (describe function)

   _____ (describe function)

   two State Department staff _____ (title or function)

   _____ (title or function)

   two university staff members _____ (title or department)

   _____ (title or department)

who could be described as career resource people.

5. Name the course options available to your specialty-oriented students in secondary schools to which they have access.

_____ _____

_____ _____

_____ _____

_____ _____

List courses which you would add, given the sanction

_____

_____

_____

_____

List courses which you would remove, given the sanction

_____

_____

_____

_____

6. Define "employability" as it relates to

Math _____

Science _____

Art/Music _____

English _____

History/Civics _____

Home Economics _____

Industrial Arts _____

Guidance _____

Special Education _____

Physical Education _____

EXAMPLE: To be able to compute the tax you as a cashier would have to add to a purchase of $7.46 (math)

7. Career Exploration is a concept which incorporates a number of dimensions.

Please weight the following:

	Slightly Significant	Moderately Important	Essential
a. developing self-understanding			
b. practice in decision-making			
c. acquiring occupational information through literature, media, and lecture			
d. narrowing selections of career options			
e. observing people working, or training for work, in a broad range of career areas			
f. beginning to match achievement (or skill acquisition) to declared interest			
g. providing simulation or "hands-on" experiences			
h. making a firm career choice			
i. being less able to rank occupations according to dignity and worth			

True or False for You:

1. _____ After this workshop experience I am more convinced than ever that career exploration is another term for occupational information.

2. _____ Career Exploration is that part of Career Development concerned with vicarious (second-hand) experience.

3. _____ I could not risk the change in instructional behavior which would be necessary if I committed myself to a study of my students' interests and values.

4. _____ I would dare to question the value of my content area beyond its in-school validity.

5. _____ Membership in a team makes it (easier, harder) for me to implement the concept of career exploration. (underline one)

6. _____ Most of my students do not need this "new" approach. The small percentage who disrupt my class would profit more from it.

A PROGRESS REPORT ON THIRTEEN CAREER EXPLORATION WORKSHOP SCHOOLS

Based on notes taken by K. B. Hoyt
May 30, 1972
CEW Consortium

LEMMEL JUNIOR HIGH SCHOOL

English

1. Skit on how to apply for a job (dropping out and coming back to school)
2. Made out job applications
3. Read want ads

Math

1. Insurance unit)
) used parents as consultants
2. Real Estate Unit)

Home Economics

1. Concentrated on child care occupations
2. Visited a TV Romper Room

Science

1. Emphasized weather - went to Friendship Airport
2. Problem one of resource personnel - reported good student reaction and enthusiasm,had coffee for parents - many volunteers from parents. Did a unit approach in each class, kids liked these units: Lawyers, Dress Designer, Boutique Owner, Bank Manager, Dentist, Travel Consultant, some of physical therapy - most were black - good role models.

CABIN JOHN

A. Six week related career units - 356 7th and 8th graders made kits out of slide tapes kids developed - parents invited to see final product. Parents reported they like having their kids come down and spend a day with them in their jobs.
B. Line Production - Emphasis on major jobs in industrial occupations - did

get experiences of actually producing on assembly line - ran an industrial arts project - sold stock - paid off stock holders from sale of product - then workers split the rest of the money.

C. Ninth grader - This is where they concentrated on their career choice - Industrial Arts counselor came in, gave test, then kids looked up occupational information.

Note: a. Regard 7th grades as learning about careers - really awareness

b. Regard 8th grades as learning about work values

c. Regard 9th grades as career exploration and tentative career choice.

JULIUS WEST

Use a unit with 9th graders just prior to 10th grade registration on in about 2 days a week in their ready unit. They clipped out help wanted ads - then wrote a business letter applying and then wrote up a telephone conversation in study form.

a. They spent time on study habits

b. Made skits on job interviews

c. Made visits to business and industry plus Vocational-Technical schools in Montgomery County

d. Have job work experience program - 300 girls involved in health occupations

e. Also jobs for boys - about 3 hours a day

CALVERT JUNIOR HIGH

Seventh grade Industrial Arts - 9 weeks career guide for boys - try to (1) help kids think about future (2) what are your goals for success? (3) what will help you move toward goals?

a. Take a "maze" vs "map" approach to considering future

b. Play "career" game - home points, happiness points, fortune points

c. Clipped out news articles depicting "success" and "failure" - had discussions about the meaning of the terms.

d. Using SRA - job experience kits - kids like it -

e. On moving towards your goals - had a sheet with good work habits - self graded - each day counted points for 6 weeks - also studied negative habits - shop lifting, drugs etc. (field trips were culminating)

ESPERANZA MIDDLE SCHOOL

Laurel Brown is Career Specialist to work with all teachers

General Project: To study jobs in community project CAN "Community Action Now". Things they like and things they wanted to change in their county - they had election for county offices - gave speeches, etc. Really worked on occupations county hires people for. Example: Chairman Humane Committee - had an animal adoption agency - really worked it in the community - Chairman Education Committee - kids became teacher aids in elementary school, Park and Recreation Committee - made a nature trail - labeled and identified trees - cleaned it up, Social Service Committee - studied Head Start - also bringing in workers from community to talk about the jobs - are doing evaluation on comparative effects of letting kids pretend they are in the jobs vs. having workers come in.

THOMAS JOHNSON JUNIOR-SENIOR HIGH

A. Fall Project - presented plan to faculty - line production to produce samples to sell at Christmas - designed in art, had work in Home Economics, Industrial Arts line production frame, personal development assembled, English, class wrote ads - math classes kept banks - real inter-disciplinary approach

b. Special Pre-Vocational Program for disadvantaged 9th boys - for kids who

are turned off from school - 18 students - 1 teacher for four periods per day.

This is a full time job - teaches English, Math, Science, Social Studies. Individualized reading and math - marked improvement - 2 year growth in ready - much emphasis on vocational activities - one-half of room has shop tools - last half of year they did some line production and talked about jobs - then did some assembly work on county projects. Second half of year - one-half work experience on jobs - paid for it (3 teacher aides, 4 as school custodians, drug store) Teacher reports he can do it because he has the time - he teaches the four basic subjects, supervises work experience and get jobs, in summer he visits home of potential students - explains kid must come to school - had improvement in attendance - 29% decrease in absence 47% decrease in attendance - kids paid in school (reading, math, etc.) in funny money - in shop they build things, repair things for people, then they take the money - buy actual things (games, baseball, etc.) which kid can buy at auction with their funny money.

C. Spring Project

Patriots Against Pollution - 146 junior high kids who will work on recycling project this summer - get kids involved in community.

D. Have taken kids on visits to Vocational-Technical Center

PERRY HALL JUNIOR HIGH

Katie Smith - Instructional Field in Career Study Program

Career Studies Program for 2 groups (25 each, 9th graders)

Objective: To "turn on" students who have been "turned off" from school

1. To get students to be more responsible citizens - going to try Behavior Modification next year
2. Career Emphasis is on Career Awareness in Occupational Families rather than study or emphasis on career exploration in specific occupations.

Activities

1. Set up 4 companies - line production, sales, etc. - one-fourth of year - student learned how to work together, depend on each other, etc.
2. Trying to involve parents - hold parent teas to inform them to get reaction - also to tell about their own occupations - working basically with a project approach.

   Boys take Industrial Arts 5 periods per week, Social Studies - formal corporation, math - banker and financing, English - sales and advertising (the 4 companies competed and saw which one won)

D.O. teachers from Senior High Vocational-Technical Center take junior high students, one at a time, with them when they go out on visits to business and industry. Fifteen field trips per year - have kids and teachers relate as people

BEL AIR MIDDLE SCHOOL

1. Mini-Courses in Career Exploration emphasizing self exploration (2 courses as of now)
2. Math Program - 21 boys (turned off kids) - behavior problems - 2 math teachers at a time - example of activities
   a. Auto Specialist - boys complete prices, etc., - has resulted in overall improvement in all grades - even in English, Social Studies, Science - as well as in math.

THIS IS ONE TO WATCH - SHOULD BE BIG EXPANSION NEXT YEAR

NORTH HARFORD JUNIOR SENIOR HIGH SCHOOL

Have made wide use of community so kids can learn about jobs out where jobs are - kids made tapes of interviews with workers that other kids could listen to.

Objectives

1. To help kids learn about work
2. To strength self concept and self understanding
3. To relate school subjects to jobs
4. Visits were introduced as part of family living unit in Home Economics so many visited their parents at work - others went with work-study coordinator and interviewed workers.

Also visited Vocational-Technical Center - could go back to visit one area longer if they wanted to - had money for substitute teachers so some regular teachers could go out, talk to employers and arrange for one or more kids to come work with someone for a day. Math teacher concentrated on helping kids make tentative occupational choices and then sent kids out to interview workers.

When kids came back, Mel then made up math projects to illustrate each occupation that the kids expressed interest in.

Side Benefit - THE TEACHERS ARE WORKING TOGETHER FOR THE FIRST TIME ON DIFFERENT ASPECTS OF SAME BIG PROJECT. THEY GET MORE RESPECT FOR EACH OTHER AND FOR THE VARIOUS SUBJECT FIELDS OTHER THAN THEIR OWN. HAD JUNIOR HIGH KIDS INTERVIEW SENIOR HIGH STUDENTS WHO WERE IN THE D.O. PROGRAM - LEARNED ABOUT EARLY LEVEL JOBS THIS WAY.

CAREER EXPLORATION WORKSHOP 1971 GOALS & OBJECTIVES

Goals -- for Individuals — To be pursued overtime in the operational setting of the workshop experience

The individual will - - - -

1. Acquire a broader understanding of the world of work through the assumption and/or research of the multiple roles of today's worker

via objective:

a) will be able to describe the motor, cognitive, and affective skills needed in at least one occupation under each of the nine broad career areas.

2. Identify the contribution he can make toward the provision of similar experiences for his students

via objective:

a) will be able to describe at least three activities which would apply his discipline in a work-simulation experience in the school setting.

3. Recognize the value of a team approach to career exploration

via objective:

a) will be able to illustrate, through written or spoken example, 4 specific connections between his discipline and those represented by his teammates.

4. Suggest means which involve the total parent/business/educational community in the career exploration process

via objective:

a) will be able to list at least two career resource people in his parent community, his business community, his community college, his county staff, and among his state and university personnel.

5. Effectively relate school subjects to broad vocational skills

via objectives:

a) will be able to name and describe the secondary school options, available presently to his specialty oriented students; will be able to name the options which should be available, but are not.

b) will be able to list at least six traits of employability which can be developed in each curriculum area in the junior high setting.

Goals for Teams - To be pursued over time in the operational setting of the home school

THE TEAM WILL

1. Demonstrate its commitment to career exploration by encouraging total staff involvement in their plan

via objectives:

a) will be able to design a time table of gradual staff addition based upon the contribution that staff member can make to both a team approach and the specific workshop plan

b) will be able to describe at least three inservice activities for teachers which will give them options for accepting or rejecting team membership

c) will have increased staff involvement by 40% at the end of year one.

2. Will be knowledgeable about a check and balance system of interests VIZ aptitudes which can facilitate the self-knowledge of their students

via objectives:

a) will be able to name and administer at least two measures of interest which are appropriate for a majority of their students

b) will be able to name or create at least two sociometric (unstandardized) devices which will elicit measures of self-concept and peer relationship

c) will be able to name, and assist in the administration of, at least two measures of aptitude which deal with actual task involvement.

3. Will engage and continually involve, members of the parent, business, and educational community in the implementation of their plan

via objectives:

a) will form a parent/business advisory committee which meets on a monthly basis

b) will elicit from working parents a work sample via slide, biography, or personal interview. (Such data may be gathered by students.)

c) will elicit from 9 representative* business firms in the school community their definitions of "employability". (Such data may be gathered by students.)

d) will establish an active relationship with an accessible community college

e) will establish a cooperative three year program of activity which introduces and maintains connections between secondary school program coordinators of vocational-technical offerings.

4. Will plan learning experiences for their students which have application to a broad range of socio-economic and intellectual backgrounds.

via objectives

a) will develop at least five interdisciplinary projects which engage a majority of the student body during their implementation

b) will provide for those students not involved by virtue of class, age, or teacher contact, and opportunity to observe, react to, and/or replicate these experiences - with team assistance to their teachers

5. Develop decision-making skills by permitting students to engage in sequences of wishing, trying, taking consequences, and evaluating their performances.

via objectives:

a) will be able to conduct at least three follow up activities which respond to results obtained from interest inventories

b) will be able to construct at least three reality-testing situations which permit students to match their present aptitudes to their declared interests

c) will provide specific times and locations for team consultations with student groups involved in self-evaluation and decision making.

For limited loan at no cost write: Counseling and Personnel Services Department
College of Education, University of Maryland
College Park, Maryland 20740

SLIDE TAPES ...more tapes have been created since this listing..make specific requests

TRANSPORTATION

Traffic Manager
Commercial Airplane Pilot
Travel Agent
Service Station Manager

SOCIAL SERVICES

Home Economics in Business
Adult Classroom Aide
Public Defender
Congressional Assistant
Special Agent--Narcotics
Mineral Curator
Musicologist
Personnel Manager
High School Principal
School Psychologist
Elementary School Teacher
Director for Workshop for the Blind
Assistant Librarian
Librarian
Psychiatric Social Worker
Minister
Speech and Hearing Therapist
P.E. Teacher--Secondary School
Museum Aid
Probation Officer
Police Officer
Patent Examiner
Group Worker
Firemen
Letter Carrier
Naval Investigator
(FBI) Secret Agent

CONSTRUCTION AND TRADES

Machinest--Model Maker
Automobile Mechanic
Locksmith
Lather
Baker
Pipe Fitter
Building and Construction
School Cafeteria Management
Building Supervisor
Short Order Cook
Brick Layer
Civil Engineer
Cabinet Maker
Auto Body Repairman
Carpet Mechanic
Welder
Carpenter

AGRICULTURE, FISHERIES, & FORESTERS

Wild Life Officer
Broiler Grower
Zoo Keeper
Greenhouse Manager
Florist
Park Naturalist
Toll Bridge Superintendent
Ground water Polution Tech.
Dairy Farmer

PERSONAL SERVICES & RECREATION

Graphic Artist
Musician
Barber
Cosmetologist
Golf Pro
Stewardess
Gas Station Owner
Employment Interviewer
Secretary
Clerical Assistant
Hotel Manager
Swimming Pool Manager
Personnel Manager
Funeral Director

MANUFACTURING

Retail Manager
Saleswoman
Division Head of Design
(Drafting and Model Shop)
Upholsterer
Power Sewing Operator
Interior Designer
Service Engineer
IBM Customer Engineer
Computer Programmer
Computer Operator
Electronics Lab Technician
Grocery Store Cashier
Systems Analyst
Electronics Assembler
Store Manager
Sears Store Exec.
Equipment Operator

MANUFACTURING (cont'd)

Aero-Space Engineer
Automobile Salesman
Advertising Account Executive

REAL ESTATE, FINANCE, BANKING

Bank Manager
Bank Teller
Insurance Agent
Credit Manager
Claims Adjuster
Apartment-Complex Business Office Clerk
Claims Adudicator
Stock Broker
Antique Show Dealer
Certified Public Accountant

HEALTH

Sanitation Crew Chief
Sanitary Technician
Veterinarian
Certified Lab. Assistant
Biomedical Photographer
Retail Pharmacist
Licensed Nurse
Medical Secretary
Dental Hygienist
Optician
Dentist
Physical Therapist
Registered Nurse
Radiologist (X-Ray)
Operating Room Tech.
Medical Secretary
Inhalation Therapist
Occupational Therapist
Research Veterinarian
Orthodontist
Medical Technology
Clinical Lab Technician
Drug Salesman

PUBLIC UTILITIES AND COMMUNICATIONS

Disc Jockey
Telephone Operator
Television Director
Assistant Editor
Broadcast Communications
Lawyer

cont'd

Gas Co. Occupations
Clerk Dispatcher
Police
Firemen
Television Broadcaster

CAREER EXPLORATION TEAM RESEARCH (one response per team)

1. To what kind of high school will your 9th graders be assigned (check one)

   traditional _____ comprehensive _____

2. How are your students oriented to secondary school offerings? (check those which apply)

   lecture _____ films _____ other _____
   visit _____ speakers _____

3. How do you presently identify students who wish to gain skills in occupational specialties?

   a) They come to us with questions and we refer them to independent research _____.
   b) We provide information about vocational offerings and keep count of those who ask for it _____.
   c) We poll entire student body and report findings to feeder high schools _____.
   d) We do not identify these students _____.

4. Describe the schools (which are accessible* to your students) offering courses in occupational specialties. Name those specialties. _____

   _____

   _____

   _____

   *reasonable distance/bus transportation

5. Do these schools provide you with information about their course offerings? _____ yes or no
   Do they maintain any kind of continuing relationship with your staff (student interest surveys, plans for reciprocal visits, demonstrations, etc.)

   _____
   yes or no

6. Within those accessible schools offering basic skill training in occupational specialties, what are the limitations? (check those which apply)

   inadequate range of courses offered _____ agree or disagree

   no attempt to coordinate with feeder junior highs _____ agree or disagree

   courses offered do not match work opportunities in community _____ agree or disagree

   no opportunity for student to transfer between occupational areas after initial selection _____ agree or disagree

7. Describe at least three ways you as teams might expose your students to alternative secondary school choices which effectively removes superior status from any of these choices.

   _____

   _____

   _____

A TEACHER/COUNSELOR
TEAM EFFORT

FOUR WORLDS

.....Explored through junior high school subject matter

.....Developed in activity form

.....Leading to potential career alternatives

The Career Exploration Workshop Component
of the
Maryland Career Development Project
Summer, 1971

First Draft
Study Purposes Only

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
HUMAN WORLD (Social)	Social Studies	Graph growth of population in cities.	Social Worker, Policeman, Real Estate Agent
		Plan and conduct a class or school colonial day where teachers and students dress and play parts in a school of colonial times - no electricity, quill pens, etc.	Teacher, Shoemaker, Carpenter, Baker, Civil Servant, Politician, Actor
		Graph the increase in the purchase of the automobile, from 1930-1970.	Automobile Manufacturer, Road Construction Engineer, Truck Driver
		Report on population growth in local county and state over past ten years.	Statistician, Bureau of Census, County Comm., Social Worker, Health Inspector, Insurance Agents, Homemaker
		Investigate and propose a solution to the dilemma of old Stonehenge.	Historian, Construction Worker, Astrologist, Archeologist
		Compare the life of the colonist in New England to that of the individual living in the south after viewing films on those areas.	Farmer, Furniture Manufacturer, Cook, School Teacher, Antique Dealer
		Have a debate concerning the quality of life today vs. life fifty years ago (life span, cures for diseases, modern conveniences, pollution, etc.)	Social Worker, Historian, Doctor, Psychiatrist, Ecologist, Lab Technician, Health Inspector, Industrial or Scientific research
		Read a story on an immigrant settling in U. S.	Immigration Officer, Naturalization Personnel, Interpreter, Ship's Captain
		Have students make a report on the growth of population in the U. S. since 1900	Social Worker, Statistician, Health Inspector, Homemaker
		Have students make a sociological study of the school community.	Home Economist, Social Worker, Day Care Aide
		Have some guest speakers from the welfare and social services of the city. (Then let students role play being a welfare recipient or a social worker).	Pupil Personnel Worker, Welfare Worker, Probation Officer, Job Corps Worker

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
HUMAN WORLD (Social)	Social Studies (cont.)	Have students discuss social injustices.	VISTA Volunteer, Peace Corps Member, Probation Officer, Architect, Engineer
	English	Have students gather local news and information about their school and present a news broadcast.	Reporter, Editor, Photographer, Artist
		Have students write a short article for a newspaper (constructing a headline) on a social problem (Use pictures or drawings to illustrate).	Reporter, Editor, Photographer, Artist
		Select a member of your family (one of your parents, preferably) and interview them concerning their life and their present activities. Write up a biography accompanied by any graphic representations of your story (e.g. childhood pictures, pictures of him/her at work, examples of his/her hobby, etc.)	Writer, Newsman, Editor, Publisher, any number of various occupations implied by a person's line of work, etc.
		Give play "The Crisis" by Samuel S. Richmond, Career Plays for Young People, Plays, Inc., Boston, 1949, p. 144.	Nurse, Doctor, Nurses Aide
		Have students develop their family tree and list as many occupations as possible with which their family has been involved.	Depends on occupations and careers of family members
		Creative dramatics culminating in original one act plays for other classes to observe.	Costume Designer, Wardrobe Mistress, Make-up Artist
	Ecology	Have each student find one harmful chemical change and a way to stop it.	Biochemist, Policeman, Congressman, Photographer, Artist
	Law Enforcement	Take students to visit a courthouse.	Policeman, Lawyer, Clerk, Judge

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
HUMAN WORLD (Social)	Law Enforcement (cont.)	Invite a state trooper to visit the school and talk with students concerning the importance of law enforcement on the highways.	Policeman, Police Cadet, Crossing Guard, Security Guard
		Set up mock trial - Example A 6th grade boy is hit by a teenage motorist when getting off the school bus--students role play the representative positions in the court room.	Judge, Lawyer, Shorthand Reporter, Recorder, Clerk, Librarian, Policeman
	Health	Have students do research on problems that are encountered with community health. After research is done they report to the class using seminar format.	Social Worker, Public Health Inspector, Nurse, Doctor, X-ray Technician, Hygienist, Mental Hygienist, Dietician, Nutritionist, Agents for Department of Agriculture, H.E.W., Food and Drug Administration, American Red Cross, etc.
		Visit a grinding mill and a bakery, discuss bread as a staple food.	Manager of Bakery or Mill, Stockroom Man, Mixer, Baker, Packager, (machine operator) Truck Driver and Salesman
		Visit a freezing plant.	Plant Manager, Receptionist, Secretary, Operator of Freezing Unit, Packer, Shipping Clerk, Truck Driver
		Visit food store (Supermarket)	Clerk, Manager, Checker
		Death is a process as natural as birth. Most of you have experienced the death of a relative or friend. If so describe your feelings, and how you might use your experience to help a friend who has just lost a loved one.	Clergyman, Doctor, Nurse, Mortuary
		Appreciate the out-of-doors for leisure time activities--follow a trail in a State park.	Forest Ranger, Camp Counselor
		"A diet for weight gain and a diet for weight loss."	Dietician, Physician, Commercial Figure Controller, Physical Education Teacher

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
HUMAN WORLD (Social)	Health	"Why Showers." Debate hygienic advantage of spray vs. tub. Interview ten neighbors and find out if they would be willing to separate their trash and take appropriate items to a recycling center, if one was available. Determine rationale.	Doctor, Health Officer Newspaperman, Sociologist, Chemist, Sanitary Engineer, Truck Driver, Public Relations, Advertising positions, Factory Workers, etc.
		Have students study and observe social workers in slum areas (interviews perhaps).	Licensed Practical Nurse, Visiting Nurse, Social Worker
		Bring in a speaker from the medical field to speak to students on drugs.	Minister, Public Health Nurse, Teacher
		Have students plan menus by using the food model to show why we need the basic "4" each day.	Homemaker, Welfare Worker, Dietician
	Home Economics	Have students study and research services available to low income families; money guides, baby-sitting, medical help, etc.	Nurse, Doctor, Day Care Worker, Home Economist, Social Welfare Worker
		Have unit on child care using children in the classroom (smaller brothers and sisters, etc.) also actual evening babysitting service with follow-up reports in class.	Homemaker, Social Worker, Babysitter, Parent, Nurse, Home and School Visitor, Counselor, Day Care Worker
		Plan and serve a tea for parents in conjunction with party foods unit.	Catering, Hostess, Baker, Cake Decorator, Sales Work, Florist
		Plan and execute a banquet as culmination of unit's work.	Baker, Hotel Manager
		Discuss solutions to food shortage problem - newly developed grains - advantages and shortcomings.	VISTA or Peace Corps Volunteer, Agricultural Researcher, Nutritionist, Home Economist, Hospital Dietician
	Industrial Arts	Plan and build housing units.	Architect, City Planner, Construction Worker
		Make a study that compares the number of workers needed in 1920 to produce a car with the number needed in 1970.	Personnel Director, Project Director, Company Historian

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
HUMAN WORLD (cont.)	Industrial Arts (cont.)	Have students study the effects of mass production on factory work.	Line Production Worker, Plant Foreman, Forklift Operator
		Have students study mass media through the building of a radio.	Electronic Technician, Repairman, Announcer, Reporter
	Applied Design	Have students select a specific occupation in the world of art, research it, and report on it.	Artist, Art Teacher, Writer, Advertising, Director, Designer, Interior Designer, Industrial Designer, Architect, Photographer, Layout Specialist, Photolithographer, Photograph Retoucher
		Design pleasant modular units.	Architect, City Planner, Construction Worker
	Guidance	Orientation of 6th graders to junior high school.	Teacher, Bus Driver, Policeman, Counselor, Principal, Vice Principal
		Have students role play counseling student who is referred to you for low achievement.	School Nurse, Counselor, Possible Doctor, Optometrist, Optician
		Visit to Vocational-Technical School.	Bus Driver, Administration of school (principal, v. principal, and counselor), All areas of school, Data Processing, Welding, Auto Mechanic, Electronics, Food Service, Beautician
		Take a field trip to a hospital, looking for personality traits that are also seen in own classroom setting.	Director, Physicians, Nurses, Nurse's Aides, Food Processors, Technicians, Maintenance, Ambulance Squad
		Have students prepare life expectancy tables on death by automobile accidents in local district, 1950-1970.	Actuary, Insurance Underwriter, Insurance Salesman, Adjuster
		In a group guidance situation, have students interview several employees from the local Social Service agency and mental health center.	Social Service Worker, Guidance Counselor, Interviewer, Rehabilitation Counselor, Health and Welfare Coordinator, Phychiatric Aide, Psychiatrist, Secretary, Social Scientist, Sociologist

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
HUMAN WORLD (cont.)	Science	Have each student devise one method to reclaim one re-usable item from garbage.	Metallurgist, Trucker, Trash Collector
		Survey water and sewer supply for one's county.	Sanitary Engineer, Public Works Worker, County Government Official
		Have students report on causes of mental illnesses.	Psychiatrist, Psychiatric Social Worker, Psychiatric Nurse, Sociologist
		Have a discussion with guest speaker on effects of illegal drugs on human body.	Police Officer, Detective, Chemist, Pharmacist, Doctor
		Construct an apparatus to study the effects of smoking cigarettes.	Doctors, Chemists, Glass-maker, Biologist, X-ray Technician
	Mathematics	Make a population graph of the U. S. (showing every 10 years since 1900) - make some of other counties and compare.	Statistician, Peace Corps Worker, U. S. Census Bureau, Census Taker, Person who predicts trends in population growth, Social Worker, Family Planning Agent
		Make a line graph to show the number of motorcycle sales for a period of time extending from 1960-1971 for at least three different makes.	Salesman, Mechanic, Insurance Agent, Statistician
		Have students fill out sales slip and compute tax.	Cashier, Salesman, Stock Boy
		Presently there is much talk about population growth. Do you think that the number of children you have or the family size trend you set will make a difference? By drawing a family tree with you and your future spouse at the head, compare the family clan size of a 1)consistent 2 child family: 2) consistent 3 child family: 3) consistent 4 child family: after five generations. (If you run out of paper, figure it out with numerical figures). After this, comment on your personal role in population control.	Demographer, Doctor, Nurse, Clothing Salesman, Designers, Ecology Workers, Sanitary Engineers, etc.

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
HUMAN WORLD	Mathematics (cont.)	Have a mock election among the students and then tally the results and figure out the percentage of voters, etc.	Newspaper Reporter, Mathematician, Statistician, Precinct Worker
		Assuming a given rent as maximum, have the students compute the cost at which low-cost public housing would have to be built in order to break even within a period of 20 years.	City Planner, Mortgage Banker, Architect, Engineer
		Have students prepare life expectancy tables on death by automobile accidents in your county, 1960-1970.	Adjuster, Actuary, Insurance Underwriter, Insurance Salesman
		"Balancing a family budget."	Homemaker, Father, Budget Analyst
		Have the student compute his father's income taxes.	Tax Accountant.
	Business	Select a private industry within your community and learn its history by studying financial brochure, and by interviews with business officials and employees and then determine its contribution to your community.	Salesman, Office Worker, Tax Accountant, Personnel Worker, Public Relations, Advertising, Plant Maintenance
	Library Science	Research various biographies about a certain person. Consider approach used, date of publication and sources used.	Biographer, Feather Writer, Book Binder, Printer, Paper Business, Reviewer, Book Store Owner

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
TECHNOLOGICAL WORLD	Industrial Arts	Establish a company; take orders for and produce in line production lecterns for teacher and student use.	Safety Engineer, Production Worker, Inspector, Public Relations, Salesman, Bookkeeper, Finisher
		Student demonstrations - build a simple radio receiver.	Radioman - U.S. Navy Broadcaster, Sound Engineer, T.V. Producer of Music
		Have the students produce many of the same item using line production methods that incorporate jigs and fixtures.	Project Director, Line Foreman, Safety Director
		Have students develop a three dimensional drawing with appropriate views of a simple machine.	Artist, Draftsman, Industrial Designer, Mechanical Engineer, Photographer
		Compare 1909 Ford w/1971 Ford through field trips to General Motors Plant and to a museum.	Machinist, Draftsman, Plant Manager
		Take students on a field trip to an automobile assembly plant to see assembly line production.	Feeder-line Worker, Tire Specialist, Pointer Engine Specialist, Transmission Specialist, Mechanic, Designer, Accessories Expert, Engineer (Automotive), Scientist, Retooler, Electronic Technician, Electrician
		Have students start a school newspaper.	Technical Writer, Stenographer, Typist, Layout Artist, Graphic Artist
		Take students to visit a newspaper office and plant. Have them later describe, as technical writers, a piece of machinery and its function to someone who couldn't see.	News Reporter, Type Setter, Printer, Newspaper boy, Photographer, Librarian
		Have students become involved in a line production, compute with them the break-even point for workers.	Accountant, Payroll Clerk, Factory Worker
			Inspector, Safety Foreman, Mechanic, Electrician
		Have students visit a local manufacturer that is completely automated.	Programmer, Technician, Master Mechanic

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
TECHNOLOGICAL WORLD (cont.)	Industrial Arts	Have the students make a drawing or "plan" of a model city that has no cars. They will give a short report on what kind of transportation the city will have, and what types of business and industry.	Civil Engineer, Draftsman, City Planner, Traffic Engineer, Traffic Agent or Clerk
		Have students make a poster showing the development and uses of the steam engine.	Railroad Employee, Shipbuilder, Mechanic, Draftsman, Miner
		Take students, set up a "factory" to mass produce something that could be used by the school -- such as school spirit items -- shakers, badges, pennants, etc.	Any "line" job, Salesman, Clerk, etc.
		Take students on a visit to nearby University of Maryland, Eastern Shore, to visit the Business Education Department to observe closely the operation of their computers and other machines in that area that are being used.	Newscaster, Cameraman, Factory Worker, Computer Programmer
		Have students design a workshop.	Industrial Designer, Draftsman, Advertising Artist
		Have students draw pictures of people and objects.	Artist, Graphic Designer
		Print a collection of original poetry.	Bookmaker, Binder, Bookstore Owner
		Wire a simple series circuit.	Electrician, Parts Manufacturer, Building Inspector
	Agriculture	"Has mechanization helped or hurt small farmers?" Discuss money investments now needed to be a succesful farmer. Use charts, graphs to show production and income.	Farmer, Equipment Salesman, Real Estate Salesman, Banker, Statistician, Stock Breeder
	Social Studies	Have students study a country with respect to U.S. intervention with scientific progress-discuss whether it really has helped the natives (by average world standards). "Before and after" displays are good.	Peace Corps Volunteer, Electrician, Plumber, Carpenter, Automation Expert
		Have students survey a community to determine the extent of unemployment due to technological advancements.	Poll Taker, Social Worker, Job Counselor

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
TECHNOLOGICAL WORLD	English	Our language is constantly changing. Find pictures or make pictures of all items you can find in or around your house that have names which wouldn't have been found in a dictionary at the turn of the century (e.g. T.V.). Ask your grandparents or an older neighbor if they know any words they used to use that are no longer in common use.	All occupations implied by items chosen, English Teacher, Lexicographer, Editor, Printer, Typesetter, etc.
	Business	Visit a business office to see various types of office equipment in use.	Manufacturing Office, Supply House, Salesman, Repairman, Business Office Work, Inventor
	Library Science	Survey various newspapers in library for: type of print, format, place of publication, circulation price, pages, advertising, etc.	Linotype Setter, Circulation or Sales, Advertising Sales, Display Work, Reporter, Editor, Paper Factory Worker
		There are many study resources that students of 100 years ago did not have. You will find out the different media available to the class and inform them. You may bring in examples and show how they work.	Librarian, Mechanical Engineer, Publisher, Assembly Worker, Salesman, Teacher, Technician, etc.
	Applied Design	Draw, render, shade, etc. labor saving household equipment.	Technical Illustrator, Advertising, Home Economist
	Industrial Arts	Show slides on local industry.	Photographer, Public Relations, Newspaperman
		Construct to scale a model means of transportation.	Bureau of Transportation, Construction Engineer, Mechanical Engineer, Auto Manufacturer, Rubber Tire Manufacturer, Draftsman
		Have class gather data and information on the C & O Canal as a mode of transportation. Could interview people in town who remember (H. Wolfe) - History of Canal. Could build a canal boat.	People who worked canal are in all walks of life. Carry over from an industry that no longer exists - could be applied to industries today. Changing from one job to another. It is easy to change jobs, etc.

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
TECHNOLOGICAL WORLD (cont.)	Social Studies	Draw time line re: History of Technology.	Historian, Teacher
		Construct a vehicle of transportation and discuss with the class the effects of this vehicle on the progress of the U.S.	Carpenter, Metal Worker, Navigator, Mechanic, Electrician, Aviator, Traffic Controller
		Visit historic museum and select an old tool or implement that had a significant impact on the industrial revolution in America. Build a scale model of it and present the findings to the class.	Tour Guide, Photographer, Metal Worker, Public Speaker, Anthropoligist, Visual Aids Worker
		Write book report on one of America's famous inventors.	Scientist, Patent Office Employee, Writer, Publisher
	Health	Layout of a gym floor to include all activities.	City Planner, Physical Education Teacher
		New therapy for handicapped could be investigated - volunteer help might be offered by class member.	Hospital Attendant, Health Technician, Physical Therapist
	Home Economics	Compare 100% cotton broadcloth fabric with a blend of cotton and dacron broadcloth as to: price, care, characteristics of fabric.	Manufacturer, Merchandizing, Chemist, Dye Worker, Dressmaker, Sales Worker, Designer
		Visit a cloth factory where some mass production is used.	Fashion Designer, Boutique Owner, Buyer, Quality Control Inspector
		Study man-made fibers used in garments and draperies at wholesale house.	Chemist, Seamstress
		Visit a food processing plant and prepare and perform a similar type operation in the foods lab.	Food Processing Worker, Secretary, Supervisor, Laboratory Aide, Food Service Employee
	Science	Go on a field trip to see an Atomic Reactor.	Nuclear Physicist, Electronics Technician, Radiation Safety Director
		"BTU out-put of gas, coal and electricity."	Scientist, Miner, Hydro-electric and nuclear electricity worker

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
TECHNOLOGICAL WORLD (cont.)	Science	Visit Conowingo Dam.	Electronics Engineer, Hydroelectronics Engineer, Mechanical Engineer, Parks and Recreation, Pennsylvania Electric Co., Maryland State Police, Fish and Wildlife Conservationist
		Take students to nuclear plant	Physicist, Ecologist, Electrician, Security Guard, Radiologist, Truck Driver, Engineer, Draftsman
	Mathematics	We must help in the opening of a boutique at our jr.-sr. high school. The manufacturing group wants to know how much stock to have. They estimate sales as follows:	Salesman, Stock Boy, Craftsman, Accountant, Publicity Agent, Public Relations, etc.
		Beadwork 7th 1 in 20 students 8th 1 in 37 students 9th 2 in 39 students 10th 1 in 42 students 11th 1 in 28 students 12th 2 in 25 students	
		Candles 7th 1 in 100 students 8th 2 in 229 students 9th 2 in 203 students 10th 3 in 203 students 11th 1 in 63 students 12th 1 in 56 students	
		Find out how many students are in each class and from that figure how many total candles and pieces of beadwork need be stocked for the opening of the store.	
		Visit an IBM plant or computer section of large manufacturing company.	Computer Programmer, Manufacturing Computer Parts, Teacher, Computer Researcher
		Take students to computer laboratory.	Typist, Electrician, Programmer, Air Conditioning Specialist, Analyst
		Have the students compute the minimum amount of materials needed to mass produce a given number of items.	Design Director, Procurement Director
		Have students build a simple multiplication - division slide rule to demonstrate principle.	Mathematician, Teacher, Design Engineer, Estimator

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
TECHNOLOGICAL WORLD	English	Have students role play the use of the telephone and telephone etiquette.	Receptionist, Telephone Operator, Secretary, Salesman
		Invite parents engaged in technological professions (specifically those involved in engineering and research at the local military establishment) to discuss their occupations and what their duties are. Divide students into small groups to facilitate and encourage discussion. Have students write reports on those professions which interested them the most and explain why.	Technical Engineering, Assistants, Laboratory Technicians, Electrical Engineer, Mechanical Engineer, Safety Engineer, Industrial Engineer, Research Scientist
		Write an essay on the effect of automation on the life of a student today.	Computer Programmer, Electronics Engineer, Television Cameraman, Telephone Repairman
		Conduct an interview with a machinist and prepare an oral report.	Mill Operator, Shaper, Reporter
		Read or make report about mass production - beginning with Industrial Revolution.	Manufacturer, Assembly Line Worker, Advertiser, Appliance Store & Repair Operator, Auto Mechanic, T.V. Repairman
	Guidance	Small group discussion with owner of city airport.	Air Traffic Controller, Aircraft Mechanic, Aircraft Engineer, Reservation Agent
		Field trip to small local industry, such as a packing company or shoe outlet warehouse.	Management, Mechanical Engineers, Sewing Machine Operators, Designers, Cutting Specialist, Public Relations, Packaging

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
ANESTHETIC WORLD	Industrial Arts	Make picture frames for art work.	Carpenter, Small business
		Visit a supermarket, choose 3 items; paint and write an advertisement for each.	Supermarket Manager, Consumer Report Specialist, Commercial Artist, Newspaper Advertising Manager, Radio Announcer
		Design a knick-knack or a "conversation piece" for the home, (using any material or variety of materials) & build it.	Craftsman, Designer, Philosopher, Draftsman, Fabricator, Welder
		Have a debate discussing the pros and cons of mass production.	Research and Development Analyst, Consumer Research Specialist
		Take a field trip around residential area of community to consider architectural design.	Building trades, Contractor, Architect, Real Estate Agent
		Have students investigate the manufacturing and construction of out-door advertising displays.	Carpenter, Sheet Metal Worker, Billboard Designer, Fluorescent Lighting Designer
		Have students study the newly proposed nuclear power plants, as compared to the old style. A field trip would be good.	Boilerman, Electrician, Architect, Industrial Designer
		Have students study new bridges, buildings, etc., which are being constructed to show the use of various geometric forms which are pleasing to the eye and also have high structural strength.	Steel Worker, Contractor, Draftsman, Civil Engineer, Architect
	English	Take your present house or apartment as an example, write a paragraph describing the dwelling, as if you were trying to sell it. Mention all "saleable" points.	Real Estate Agent, Newsman, Printer, Secretary, Printing Machine Operators and designers, Technicians, "Typesetters", etc.
	Home Economics	Arrange color schemes using fabric swatches to produce pleasing effects considering hue, value intensity, and texture.	Interior Designer, Fabric Designer, Fashion Designer, Saleswork, Painter

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
AESTHETIC WORLD (cont.)	Home Economics	Assuming you could use any decor, furniture and furnishings you desire, design and furnish on paper a room of your own which you would consider ideal. Find standard measurements for items such as desks, chairs, beds, dressers, tables, etc., Put all measurements on a floor plan. You might include color drawings or models of any special area you might design, e.g. cabinets, decorations, etc. Remember everything has to fit to scale!	Carpenter, Architect, Interior Designer, Electrician, Painter, Lumberjack, etc.
		Make examples of and report on clothing styles of the past which are popular today (study paints to help).	Fashion Reporter, Fashion Designer, Seamstress, Clerk in clothing store, Homemaker
		Discuss and make a wall hanging either seasonal or non-seasonal - it could be a group or individual project.	Interior Designer, Seamstress, Fabric Designer, Mill Worker, Custom Craftsman
	Mathematics	Prepare poster of snowflakes - discussion of geometrics.	Geophysicist, Meteorologist, Naturalist Photographer, Design Engineer
		"Where is there symmetry in nature?"	Biologist, Horticulturist, Mathematician, Designer
		Collect from magazines pictures of geometric designs in architecture. These designs could also be photographed.	Designer, Contractor, Builder, Mason
		Using compass, straight edge, protractor, and free hand, construct a personal coat of arms using geometrical patterns.	Artist, Structural Engineer, Designer, Landscaper
		Study ratios in vibrations of scale tones in chords.	Composer, Arranger, Performing Musician, Music Store Operator, Band Director
		Have student study a display of coins to become familiar with counties represented, coin values, metals used.	Coin Shop Manager, Banker, Engraver, Metalurgy Expert, Finance Manager

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
AESTHETIC WORLD (cont.)	**Social Studies**	Set up display of antiques.	Display Designer, Antique Dealer, Refinisher
		Describe the evolution of morality in relationship to fashion trends.	Fashion Designer, Philosopher, Clergyman, Sociologist, Clothing Salesman
		Research the effect World War II had on our present culture through films, interviews, pictures, etc.	Historian, Librarian, Artist, Reporter
		Contrast and re-enact the social and cultural leisure time activities of the various cultures represented by early America and their development to the present time.	Cosmetologist, Costume Designer, Director, Composer, Musician, Dancer
		Make a travel poster on U. S. possessions.	Travel Agent, Photographer, Commercial Artist, Social Director on tour ship
	Health	"Floor Exercise vs. modern dance."	Art Designer, Space Consultant
		Study the part that drama can play in helping mental patients and those with speech problems observe if possible and role play.	Stage Manager, Set Designer, Speech Therapist
		Our class is going to have a dinner. We will plan the menu, set the tables and prepare the meal. Plan the meal taking into consideration: Seven food groups, the blending of tastes, the appearance on the plate, and the practicality of the menu.	Dietician, Cook, Waitress, Farmer, Butcher, Grocery Clerk, Factory Worker, Package Designer, Packing Equipment Designer and Technician, etc.
	Fine Arts	Have the students discuss the place of the artist in today's world.	Commercial Artist, Graphic Artist, Printmaker, Factory Worker, Artist
		Have the students attend a musical concert or a cultural program and observe the different performers.	Actor, Designer, Stage Manager, Vocalist

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
AESTHETIC WORLD (cont.)	Science	Using various grafting techniques, investigate the reaction and growth capabilities of tree grafts.	Tree Surgeon, Forest Ranger, Biologist, Ecologist, Fruit Farmer
	Applied Design	Arrange dried flowers.	Florist, Salesman, Homemaker
	Guidance	Attend a play or concert.	Composer, Playwriter, Stage Director, Choreographer, Makeup Artist, Cosmetologist, Fashion Designer, Actors and Actresses, Musicians
		Visit Smithsonian Institute	Historian, Museum Curator, Taxidermist, Papyrologist
		Have students plan and execute a bulletin board for the Guidance Office.	Artist, Advertising Man, Art Teacher, Designer
	English	Based on their studies of colonial life in America have students write reports on the various types of clothing worn by our colonial ancestors. This project may be coordinated with the Home Economics Department and some costumes actually made.	Journalist, Anthropoligist, Costume Designer, Historian, Seamstress
		Listen to record of collection of civil war songs.	Choral Director, Record Distributor, Poet, Vocalist
		Follow the treatment of 3rd class mail and compare with the air mailed letter.	Postman, Pilot, Truck Driver
		Do a comparison of the works of two poets.	Professional Writer, Editor, Copy Reader
		Choose five paintings and listen to five songs and write a paragraph describing the feelings you have concerning the artist and composer for a critical review.	Artist, Composer, Musician, Journalist Disc Jockey, Critic
		Make a report, or write a skit (perhaps comical) about modern art and its interpretation.	Artist, Museum Operator, Manufacturer and/or Distributor of Artists' supplies, Art or Dramatics Teacher

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
AESTHETIC WORLD	Social Studies	Invite a guest lecturer to speak to students on the creative use of leisure time.	Hobby Shop Owner, Boy or Girl Scout Leader, Sporting Goods Salesman
		Have a discussion on how cultures have expressed themselves through art or music. Then have students tell a story using hieroglyphics.	Musician, Artist, Sociologist, Archeologist, Composer
		Have students write an essay on what they think a poem or a song is trying to say about the author's time: Students could compare essays with actual history lessons of the time it was written.	Diplomat, Officer in the Foreign Service, Motion Picture Director, Actor, Dancer
	Home Economics	Have the students plan a decorating scheme for the interior of their home or room.	Wood Finisher, Exterior Decorator, Painter, Wall Coverer, Floor Coverer, Drapery Expert, Furniture Salesman, Interior Designer, Space Planner, Interior and Exterior Lighting Specialist, Buyer, Theatrical Lighting Designer
	Science	Student demonstration of sounds produced by electric guitar.	Musician, Piano Tuner, Electronic Engineer, Metallurgist
		Write a paper on how industry is polluting the world and how industry is keeping the world from being polluted.	Biochemist, Ecologist, Chemist, Meteorologist
		Make a study of conservation methods being used.	Ecologist, Conservationist
		"Crystals and colors formed by different chemicals".	Scientist, Chemist

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
AESTHETIC WORLD	Science	Distinguish between different musical tones using glasses filled with different amounts of water.	Orchestra member, Audio Specialist on Television Show, Audiologist
		Make a chart showing how various colors affect people's behavior.	Psychologist, Advertising Agent, Painter, Architect, Interior Designer
	Fine Arts	Visit a museum of Fine Arts. Have students choose an artist they would like to know more about. Have them research and then make verbal or written biographies of the artists. Ask them if they can understand anymore about the work of the artist after having done their reports.	Museum Curator, Tour Guide, Librarian, Guard, Artist, Art Historian
		Take students on a field trip to a museum of American Art.	Tour Guide, Craftsman, Photographer
		Have the students prepare as individuals or in small groups, a commercial from some communications media. Have them prepare sets and act out these commercials.	Actor, Art Designer, Set Designer, Announcer
		Plan a trip to a museum and a modern art gallery to contrast arts of the past with today's trends and emphasize how art trends reflect the time.	Architect, Painter, Commercial Artist, Historian
		Have students make decorative candles.	Candlemaker, Salesman, Store Owner, Craftsman
	Math	Have student's take a survey on the most popular rock musicians.	Disc Jockey, Record Shop Owner, Salesman, Manager, Statistician
	English	Have students write a paragraph expressing the difference between hard rock as compared to folk music.	Musician, Disc Jockey, Composer, Journalist
		Arrange to have students see a college or professional play. Have them write a play, using the personalities of the classroom, which relates to a human condition of concern to the students.	Actor, Actress, Playwrite, Correographer, Stage Manager, Set Designer

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
NATURAL WORLD	English	Yours is a growing community and within a few years will be even more prone to the degenerating ecological system plaguing other cities. Write a letter to "Friends of the Earth" describing the situation in general, and any particular area you know of. Find out what steps you as an individual, or the class as a group, could take to help alleviate the situation.	Secretary, Sanitary Engineer, Conservationist, Chemist, Game Warden, Forest Ranger, Biologist, Oceanographer, etc.
		Have students write a letter to the pollution control board to obtain information concerning programs in the community.	Journalist, Proofreader, Secretary
		Have students write a composition (or poem) about "What I see when I look around me, or out my window", etc.	Newspaper Editor, Writer
		Analyze with students a hometown paper as to needs and services, possibly start a school paper.	Newspaper Editor, Journalist
		Take students on a field trip to the newsroom of a metropolitan newspaper and see its complete operation and how it contributes to the world of journalism.. Could emphasize the relationship of English to journalism.	Journalist, Reporter, Writer, Newscaster, Editor, Publisher, Photographer, Cartoonist, Copy Writer, Rewrite man, Typist, Proofreader, Telegraph Operator, Cable Operator
		Have students write a report on the effect of water pollution on marine life in our lakes and streams.	Journalist, Environmental Health Engineer, Ecologist, Marine Biologist, Fish and Game Warden
		Keep a journal on changes taking place during the month of March.	Zoologist, Botanist, Journalist, Illustrator
		Write a poem, essay, etc. on the change from fall to spring.	Poet, Reporter, Playwrite
		Read current materials on ecology and pollution.	Conservationist, Writer, Ecological Researcher, Water Purification, FDA Worker - quality control

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
NATURAL WORLD (cont.)	Science	We have been given two acres of the local nursery grounds. Find out from them which types of trees and shrubs grow well in this area. Find out also, the amount of growing room needed for each type. Arrange on paper, how you would utilize this land to grow the most trees and shrubs. Include at least five varieties.	Gardener, Horticulturist, Fertilizer Manufacturer, Botanist, Chemist, Soil Conservationist, Nursery Worker and Operator, Landscape Architect, etc.
		Describe the effects of continental drift and show how the U. S. will change in relationship to her neighbors.	Oceanographer, Ecologist, Merchant, Historian, International Lawyer, Politician, Biologist, Meteorologist
		Study air pollution index in your county.	Ecology Expert, Health Inspector, Agricultural Agent, Department Air Pollution Controller, Sanitary Engineer
		Have guest speaker tell about "probabilities" of weather forecasting.	Meteorologist, T.V. Weather Forecaster, Newsman (T.V. or radio)
		Make a collection of spring wild flowers.	Botanist, Museum Curator, Scientific Classifier (Taxonomist)
		Have students prepare slides of polluted water in the city.	Laboratory Technologist, Ecologist, Pathologist, Sanitary Engineer
		"Rabbit or mink farming for profit."	Farmer, Marketer, Breeder
		Have students distill water.	Chemist, Lab Technician
		Take students on a nature hike and upon returning, set up an insect collection.	Entromologist, Horticulturist, Gardener
		Have students construct a windmill for a source of power.	Soil Conservationist, Produce Farmer, Agricultural Extension Agent, Weatherman, Beef Farmer, Dairy Farmer
		Have students make a study of plant growth.	Farmer, Soil Conservationist, Agricultural Engineer
		Have students grow flowers and plants which they would sell later, after setting up a shop.	Horticulturist, Florist, Chemist, Sales Clerk

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
NATURAL WORLD (cont.)	Science	Have students research methods of planting to stop soil erosion. Have them learn how to interpret directions and develop a vocabulary of lawn care gardening. (To meet the need of local school having dusty clay surface and little grass.)	Gardener, Nurseryman, Landscape Architect
		Have students make a picture display of our natural environment contrasted to our man-made environment.	Botanist, Gardener, Forest Ranger, Conservationist
	Applied Design	Bulletin board - occurence of rhythm and balance in nature.	Graphics Layout, Advertising Artist, Park Naturalist
	Industrial Arts	Plan and build a bookcase for classroom: (visit to purchase lumber, nails, and finish.)	Mathematician, Carpenter, Sales Person, Foreman of Lumber Yard, Hardware Store Clerk, Painter
		Visit construction site; over a period of time.	Machine Operator, (trucks, bulldozers, steam shovels, etc.) Carpenter, Cement Worker, Brick Layer, Plasterer, Painter, Electrician, etc.
		Visit to sewing plant (dress or other).	Bus Driver, Manager of Business, Receptionist, Foreman, Lineman, Cutter, Shipping Clerk
	Health	Pasteurizing of milk (visit a dairy).	Farmer, Feed Store Manager, Plant Manager, Operators of machines to process milk
		Discuss chickens as a source of food. Visit a chicken farm: Visit a feed store: Learn the process of getting chickens to the market under sterile conditions.	Farmer, Agricultural Agent, Economist
		Visit a grinding mill and a bakery, discuss bread as a staple food. Discuss organic foods.	Manager of Bakery or Mill, Stockroom Man, Mixer, Baker, Packager (machine operator), Truck Driver and Salesman
		Visit a freezing plant, discuss health reasons for low temperatures.	Plant Manager, Receptionist, Secretary, Operator of Freezing Unit, Packer, Shipping Clerk, Truck Driver

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
NATURAL WORLD	Guidance	In a group guidance session on career planning, invite the local senior high school teacher of agriculture to speak on careers in his field. Have students make individual reports on his remarks concentrating on those areas which might interest them as careers.	Agriculture Teacher, Journalist, Landscape Architect, Ecologist
		Take students on a trip to a lumber yard.	Logger, Cabinet Maker, Wood Planer Operator, Carpenter
		List the effects and sensations drugs have on young people.	Federal Drug Administration, Narcotics Agent, Physician, Emergency Room Specialist, Psychologist, Psychiatrist, Research Scientist, Juvenile Probation Officer
	Industrial Arts	Construct a scale model of man's "created environment."	Mechanical Engineer, Draftsman
		Have students construct a scaled water control drainage system.	Construction Engineer, Agricultural Agent, Statistician, Weatherman, Soil Conservationist, County Surveyor, Sediment Control, Highway and Road Commission
		Form a mining company and design and build a scale model of a mine.	Executive, Laborer, Engineer, Construction Worker, Consultant, Geologist
	Ecology	Take students in groups on a field trip to see the different methods of conservation (air, land and water).	
		Take students on a field trip around their own school environment. Encourage them to find ways of beautifying an area of the school grounds.	Surveyor, Landscaper, Farmer
		Have students go out into their city and count the ways the air is polluted (by looking around and/or talking to people).	City Councilman, Store Owner, Policeman
		Have the students write a letter to a government department or private company asking for information on ecology projects and problems.	Mail Carrier, Soil Conservationist, Government Employee

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
NATURAL WORLD	Ecology	Take students on a tour with a natural conservationist in a rural area.	Farmer, Contractor, Ecologist, Land Conservationist
		Invite a panel of waterman to see how each contributes to the balance of nature and conservation of wildlife.	Dredger, Boat Salesman, Oysterman, Fisherman, Marine Hardware Salesman, Wildlife Conservationist, Crab Pot Maker, Fishnet Maker, Boat and Tackle Shop Owner, Marine Conservationist
		Survey local soil and wildlife conservation concerns--choose one to investigate. Have students use communication skills to convince the community that something needs to be corrected.	Soil Conservationist, Wildlife Conservationist, Reporter, Photographer, Librarian
	Math	Have students compute the volume of a hill.	Surveyor
		"Pollutants per cubic mile."	Environmental Engineer, Statistician
		Figure the longitude and latitude of your city.	Geodetic Surveyor, Map Maker, Geographer, Topographical Artist
		Organize and set up an order similar to the Pythagorean Society.	Astronomer, Philosopher, Palm Reader, Social Worker, Magician
		Find rate of a stream current; find rate of rowboat going with and going against the current.	Lifeguard, Naval Officer, Conservationist, Boat Designer, Manufacturer
		Have students make a bar graph of the distribution of tree species in two acres.	Forester, Lumberman, Ornithologist
		Count the number and species of trees in a forest in the community. Have students compute the number of trees that could be cut per year and have the forest naturally replenish itself, using the growth rate of the various species.	Forester, Botanist, Lumberman
	Social Studies	Plot map of population, regarding geography.	Politician, Surveyor, Map Draftsman

PROBLEM TOPIC	CLASSROOM ACTIVITY		CAREERS
NATURAL WORLD	Social Studies	Describe the effects of geography on the formation of population centers.	Factory Worker, Farmer, Fisherman, Tradesman, Meteorologist, Road Construction
		Discuss climatic effects on living in the U. S. through student background probably from travel.	Weatherman, Construction Worker, Statistician
		Explore geographical relationship to historical events. A study of the battles in history and the effect of terrain and weather on them. Plan a battle using predetermined weather and terrain.	Military Career, Weather Forecaster, Historian, City Planner, Architect, Military Career, Weather Forecaster, Historian, City Planner
		Make a topographic map of the U.S.	Map Maker, Surveyor, Geologist, Explorer
		Make a map to show population density in relation to geographical environment.	Cartographer, Printer, Builder
		Have students choose a geographical area and tell and demonstrate survival (making posters, transparencies, etc.)	Marine Botanist, Geologist, Meteorologist, Astronomer, Ecologist, Oceanographer, Cartographer
	Home Economics	Research plants for use in the home - how to select plants, care for these plants.	Horticulturist, Farmer, Botanist, Florist, Nursery Worker, Landscape Designer
		Collect samples of wood finishes for furniture and woodwork.	Cabinet Maker, Furniture Refinisher
		Plant a garden - keep an account of expenses and yield from customer purchases.	Agriculture, Farmer, Marketer, Grocer, Homemaker, Orchardist, Small stand produce operator
		Compare the cost of 8 ounces of orange juice: frozen, fresh, canned.	Restauranteur, Transportation, Retailing, Packaging, Refrigeration, Advertising
	Library Science	Make a study of prints and transparencies of birds indigenous to our area.	Forest Ranger, Park Service Attendant, Ornithologist, Feed Business, Photographer, Fire Fighter, Artist
	Business	Study population growth record of home town in the past ten years in relation to housing.	Lawyer, Town Planner, Social Worker, Building Supplier, Furniture Supplier, Insurance Salesman, Loan Company Mgr.

CAREER EXPLORATION PLAN - June, 1971

Perry Hall Junior High
Perry Hall, Maryland

Team Members

Michael Goldsmith
Charles Wolfkill
Sharon Hurley
Jack Reagan
Annette Downs

I. Major Problem: Most students in junior high are unable to make wise decisions regarding high school course selections leading to future career choice.

II. Purpose: Through simulating work experiences utilizing industrial arts as the core with the other disciplines of home economics, science, and guidance contributing to the total program, we plan to change student, faculty, and community attitudes toward the world of work. The addition of English, art, math and social studies in the future would lead to a total school involvement in career exploration.

III. General Objectives for Staff:

A. To demonstrate to the faculty the need for an effective career exploration program in the junior high.
   1. Based on pre-test date, the teacher will achieve the following gains.
      a. He will be able to list five additional career applications to his disciplines.
      b. He will be able to name the educational opportunities in the community.
      c. He will begin to start listing the general areas of career choices.
      d. He will be able to identify community resources.
      e. He will be able to list basic subject concepts and relate them to basic vocational skills.
   2. Based on government statistics, the faculty will be able to identify the need for a non-college trained labor force.
      a. He will be able to compare various job requirements based on education, training, and occupational needs.
      b. He will be able to list the monetary and social advantages of a non-college trained occupation.
      c. He will be able to state the self-satisfaction of choosing a career by interest rather than by social pressure.

B. To show the necessity for the faculty to become involved in order to create an effective total program within the school.
   1. Be able to utilize the faculty as resource people within the existing program.
   2. Utilize the faculty to evaluate the career exploration program.

C. To list those traits of employability a student must consider to make realistic career choices.
   1. By use of a preference ranking chart utilizing an exercise in rational decision-making, list various job values as they relate to career choices.
   2. Faculty in each discipline should be able to list three occupations and investigate educational requirements and traits necessary for entrance into occupations relating to their own area.

IV. General Objectives for Students

A. The student will be exposed to a variety of background career-related experiences to enable him to weigh alternatives leading to a realistic decision.
   1. The student will be able to name seven jobs under each discipline.
   2. The student should be able to list job requirements for one job under each discipline.

3. The student will be able to observe and evaluate on the job observations.
4. The student will be given the opportunity to evaluate job characteristics as they relate to his own interests and ability.

B. The student will be provided with opportunities for success to help him to develop positive self concepts utilizing his abilities, talents, interests and to become aware of his place in society.
   1. The student will be able to use objective data to aid in his self evaluation.
   2. The student will receive specific tasks according to his capability.

C. The student will be provided with the opportunity to develop those attitudes and basic skills necessary for successful entrance into an occupational area of his choice.
   1. Given a specific task, a student will be able to demonstrate his ability to perform based on a pre-determined criteria for evaluation.
   2. Student attitude shall be assessed at regular intervals during the year.

D. The student will be provided with the opportunity to develop social and communicative skills.
   1. The student through the curriculum area will develop written materials that encompass the communicative skills.
   2. The student will participate in group activity in the school as well as participate in social interaction out of school.

I. Staff Activities
   A. Administer pre-test
   B. Visit to Eastern Vocational Technical School while school is in session, in order that the teachers will be able to see the relevancy of their discipline to occupations.
   C. Follow-up discussion where teachers are asked to identify skills relating to their discipline.
   D. Panel composed of students from Eastern Vocational Technical School, a drop-out who went back to school, and a college graduate unable to secure a job; to discuss how the school could have better prepared them for the world of work.
   E. Panel from the community consisting of non-college trained people to discuss, "How could the school have helped me prepare for my career?"
   F. Invite a guest speaker, such as Dr. Hoyt, to present a "sensitivity experience" to stimulate the faculty in becoming career oriented.

II. Student Activities
   A. Strategy: To explore and investigate the technological world through concentrated studies in the various curriculum areas, utilizing the concept that technological education is the basis for man's ability to provide for himself and function in his environment. From this we make the basic assumption that each curricular area in the junior high school has as its basic content the overall study of technology. Technology may be defined as a concept which encompasses the total society within which we live. Included in this area are the various phases of our world--example--industry and its relationship to the sociological, physiological and ecological interrelationships of man and his physical world.

      Listed below are a series of activities that are applicable to all curricular areas and should be implemented by each curricular area to provide career exploration as a part of the study of technology.

   B. Activities: Industrial Arts will be the major core with the major topic being under the broad area of manufacturing. The students will investigate either the fabrication or processing industries as they relate

to manufacturing. The students will choose a segment of either industry and explore it in detail.

1. Techniques used.
   - A. Role playing in simulated company structure.
   - B. Project orientation to industrial arts laboratory.
   - C. Construction of a representative phase of the industry.
   - D. Research into the function of the industry.
   - E. Field trips
     - a. A trip to an industrial manufacturing plant showing the useful organization of tools, materials, people and machines for the production of goods.
     - b. A trip to a service industry depicting the organization showing the tools, materials, people and machines which provide services.
     - c. A visitation to a fabrication industry showing organized manufacturing from processed materials and piece parts.
     - d. Visitation to a processing industry depicting organization and manufacture of useful materials and stocks from raw materials.
   - F. Guest lecturers from industry.
   - G. Use of tapes of on-the-job interviews.
   - H. Audio-visual materials depicting related occupations.
   - I. Applied games.

Home Economics: The major topic will be under the broad area of child development.

Due to the influence of technology in our society today, the role of the woman has changed from homemaker to the dual role of homemaker and wage-earner. As a result of this change the student may investigate and research the growing need for child care services. The students, as a group, will select an area of child care service, explore the career possibilities, and implement a similar child care program in the classroom.

1. Techniques used.
   - A. Field trips
     - a. A field trip to a day care center.
     - b. A field trip to a nursery school or kindergarten.
     - c. A field trip to a family day care home.
2. Other techniques will be developed similar to the program techniques used by industrial arts.

III. Suggested activities related to other disciplines.

- A. English
  1. Write a job resume
  2. Interview techniques
  3. Technological writing
  4. Telephone etiquette by role playing
  5. Writing business letters and thank you notes
- B. Math
  1. Measurement
  2. Bookkeeping
  3. Quality control techniques
  4. Financing
  5. Purchasing
- C. Social Studies
  1. Guest lecturer to speak to the students on the creative use of time.
  2. World of work tapes
  3. SRA Work Kit

4. Labor management
5. Labor relations
6. Physiological and psychological effects of work

D. Guidance
1. Coordination of the program
2. Administration of interest tests
3. Interpretation of tests given

E. Home Economics
1. Explore uses of the by product or material as it relates to consumer goods.
2. Comparative studies of consumer goods
3. Analysis of packaging and labeling
4. Advertising

CAREER EDUCATION IN HOME ECONOMICS

Material prepared for the
Career Exploration Workshops

University of Maryland, College Park
June 21 - July 9, 1971
July 12 - July 30, 1971

CAREER EDUCATION IN HOME ECONOMICS

WE BELIEVE

In order to achieve the unique benefits which home economics can contribute to career education, We Believe that instructional goals, evaluation, and the learning environment should be designed to help the individual:

- Understand his multiple roles and their interrelationships in the economy -
  - The role of consumer and family member
  - The role of worker
  - The role of citizen
- Understand the multiple roles of family members
- Understand the changing roles of men and women
- Grow in self-understanding and self-awareness in terms of his interests and abilities, interpersonal relationships, and social skills
- Develop proficiency in solving problems and making decisions
- Understand and relate the classroom learning experience to role responsibilities
- Develop a positive attitude toward self
- Gain insight into careers available in the various occupational clusters
- Understand the significance of work in the various occupational clusters
- Evaluate the quality of products and services provided for consumers
- Understand that career education is an integral part of the home economics program

HOME ECONOMICS WORKSHOP PROJECT

9:00 A.M.

I. Presentation of Project - Establishing and Operating a Small Business

Description of the situation

A. The Small Business - a boutique and producers of boutique merchandise

- A boutique is defined as a small retail shop that specialized in gifts, fashionable clothes, and accessories.
- Boutiques provide an opportunity for careers at home, a small business for a family, an individual, or a partnership.
- Boutiques need to be properly located and provide unique and highly popular merchandise.

B. The Entrepreneurs - The families and individual community members

In a given community or metropolitan area similar to yours, we find 5 groups of individuals who are in various stages of entering the world of business. These groups are:

1. Two (2) families after their investigation of needs for small businesses in their area, decided to establish and operate a boutique. Their investigation revealed that boutiques are successful when they offer a high fashion specialty. Because of the present demand for fashionable ties for men, this item will be the number one specialty. The ties will be secured from three sources: a very small fashion line production business located in a home, owned and operated by a homemaker; independent private suppliers on a custom basis; and a local wholesale distributor.
   - Each family consists of the father, mother, a grandparent, and two teenage children.
   - Each family will purchase ties, set up, and operate a boutique.
2. A third family has also decided they would like to establish a small business, but they are still in the process of investigating the merchandising aspects of operating a boutique: (a) the kinds of merchandise and services most profitable; (b) how and where to obtain the merchandise; (c) how and when to advertise; (d) how to display and package the products; (e) selling strategies.
   - The family consists of the father, mother, and three children (two teenage and one college age).
   - The family will set up an exhibit of profitable merchandise for boutiques. The exhibit should also include sales promotional methods in advertising, displaying and packaging the products.

3. A homemaker in one (1) family would like to expand her already successful home career in making fashionable clothes and accessories by employing other people to work in her home workroom.

   - The group will consist of the homemaker and four individuals she will employ as workers in her business (some may be members of her family).

   - The homemaker will use a simple line production technique in making men's ties which she will sell to boutiques and other specialty stores.

4. Several (5) individuals wish to make products for boutiques on a custom or consignment basis.

   - The individuals may represent a variety of community members such as: teenagers, retirees, young homemaker with young children, homemaker with grown children, senior citizens, employed men and women, college student or handicapped person.

   - Each individual will make men's ties for sale in boutiques on a cash or consignment basis and will also provide custom services.

9:30 - 11:45 A.M.

II. Team Assignment and Organization - Decisions! Decisions!! Decisions!!!

1. Each team will be designated as one of the community groups described in I-B.

2. Designate roles for each team member according to composition of your community group.

3. Choose a family name and/or business name.

4. Role Play - Decisions that will be needed to carry out the assignment for your community group.

   - In regard to the three major areas of business organization listed on supplement, decide on the kind of information and resources you will need as a family team or as an individual to guide you in developing and maintaining a successful business.

   - Some competencies needed by the personnel involved in the business.

   - Evaluation of the material and human resources of the family or individual on the basis of decisions made in above two statements. Should this family or individual continue their interest in establishing a business?

   - The occupational roles to be assumed by the members in your group on basis of personnel needed - manager, salesmen, bookkeeper, production worker, etc.

   - How the business will contribute to the overall welfare of the community.

5. Procedures and methods each team will use in carrying out their specific responsibilities such as: researching, reporting, producing products, setting up exhibits, opening and operating a boutique.

11:00 - 11:15 Demonstration on sewing ties for line production

11:30 - 11:45 Demonstration on sewing hand-made ties

11:45 - 1:00 P.M. LUNCH

1:15 - 3:15 P.M.

Team Research and Sewing of Ties

Resources:

Boutiques and other small business establishments
Boutiques in home or on family property
Boutiques in department stores
Specialty Shops
Banks
Real Estate Offices
Chamber of Commerce
Library

Department of Business Administration - University of Maryland
Specialist in Business Administration
Specialist in Distributive Education

MONDAY, JUNE 28, 1971

9:00 - 10:30 A.M. Team Work Continued

- Preparation of Team Reports (all teams)
- Production of Ties Completed (2 teams)
- Ties Sold to Boutiques
- Set Up Exhibits of Merchandising Aspects of a Boutique (1 team)
- Set Up Boutiques (2 teams)

ILLUSTRATE REPORTS WITH PICTURES, CHARTS, SKETCHES, ACTUAL MATERIAL

10:00 - 10:15 A.M. Demonstration of Line Production

10:15 - 11:15 A.M. Report by Teams - Show and Tell
(15 minutes maximum for each team)

- Establishing and Operating a Boutique (show display)
- Merchandising Aspects of a Boutique (show materials)
- Small Business: Custom Made Product
- Small Business: Mass Produced Product

11:15 - 11:30 A.M. The Boutique is Open

11:30 - 11:45 A.M. Discussion

I. Line production model. The following examples could be developed for both boys and girls. The time evolved would vary with the product and project selected.

a. Boutique - stressing small business, retirement/a vacation, family enterprise

This model would allow for some individual project development. A small group could select this project so that more than one item would result. Example: (1) neckties, (2) leather goods, (3) macrame', (4) candy, (5) dashiki, (6) jewel box. The operation would include all phases of manufacture and sale.

b. Food production and management

Grades 7-9

Using the line production technique, one project would be carried out. Example might be:

(1) Fast foods (modeled after drive-in)

(2) Specialized foods (make and sell fresh rolls every Friday)

(3) Meal preparation (tearoom lunch for teachers every Thursday during the unit)

II. Family group model - Decision making model - Division of Labor

A. Complete meal preparation and/or single dish preparation by each family group.

Grades 3-6

1. Divide total group into varying size families; income level; family structure.

2. Choose membership roles.

3. Use management process (to carry out responsibilities)

a. Planning (goals, values, resources such as money, time, talents, experience, etc.)

b. Controlling - organizing duties, time techniques

c. Evaluating procedures and product

B. This model will place emphasis on developing personal attributes for the dual role of homemaker and employee through:

1. Decision making (what type meals, etc.)

II. B. (cont.)

2. Evaluation of one's performance

3. Carrying out responsibilities

4. Inter-personal relationships (ex-needs of all family members - young child, convalescent, older person)

5. Skills in meal preparation

6. Creative approaches

7. Personal achievement

8. Appropriate appearance

III. Insight into careers

Objective

Integrating career principals into existing curriculum

Content on Careers

Relate career opportunities, identified with skills of communication, production, service and governance

Personal qualities needed, each level

Salaries on various levels

Training needed

Responsibilities

Satisfactions

Some procedures

Each student selects career in which he is interested and through interviews finds out the characteristics reporting to class by means of slides and tapes. Give related experiences in each unit employing line, unit, and single proprietor techniques and noting other career principles involved.

Examples:

Foods - fast foods production on a certain week day, sold to faculty and

Clothing - a specialty item made to sell such as ties, suede items, belts, etc. (the "in" item for the year).

Child care - career levels, legal aspects, responsibilities involved in child care activities in the play school or home care.

Personal relationships - self-understanding personal characteristics needed for related careers.

Interior design - making pillows, wall hangings, jewelry boxes

Health - related services and skills which permit student experience in nearby hospitals, clinics and playgrounds.

MANAGEMENT AND CONTROL	FINANCIAL MANAGEMENT	MERCHANDISING, ADVERTISING, AND SALES PROMOTION
Location business	Source of funds or credit	Selling strategies
Production and marketing	Budget and expense controls - capital required	Pricing the merchandise
Production standards - quality control	Working capital (salaries, insurance, business taxes, fringe benefits)	Displays - windows and inside
Personnel needed	Financial statement - records and bookkeeping	Receiving and shipping
Directing sales and service personnel	Credit management	Delivery and distribution
Purchasing and collection	Legal matters	Advertising and sales promotion
Inventory control		
Cost control		
Name of business		
Type of ownership		
When to avoid competition		

You will need to make many decisions such as,

How much business would you like to do?

What is a reasonable goal for annual net income?

What percent of gross sales will you spend for promotion and advertising?

Where will you obtain products for your type of business?

"CAREER EDUCATION IN INDUSTRIAL ARTS"

Two situations illustrating teaming potential of Industrial Arts process utilized in the Career Exploration Workshop(s) Component of the Maryland Career Development Project Summer 1971

One of the two approaches recommended deals primarily with people and how they function within a community setting. Another approach has a heavier emphasis upon the product and how its people are organized and function in relation to the production of that product.

A. In the first approach, the following may take place:

1. Emphasis should be placed on activities that will involve all nine of the broad career areas (Health; Personal Services; Social Services; Agri-
7-12 Business; Manufacturing; Transportation; Communications; Construction; and Real Estate-Finance-Banking)

2. Establish a hypothetical town set-up (this could be either a large city, a town, a rural community, or any other mixture thereof).

3. Divide the class into one or two man teams and use the unitary method of teaching.

4. In this approach, the entire class would determine the kinds of people needed for an effective community which should include all nine of the broad career areas.

5. Each individual team (one or two students) would select the area that seems to interest them, using the criteria that only one team may select any one area.

6. Each team would then research the individual job function that they have selected and make a presentation to the rest of the class so that all individuals could become knowledgeable or aware of that particular job.

   a. This knowledge could be obtained through the use of written materials and/or
   b. A personal interview with an individual in a like position (either the students would go to the individual or he would come to the school setting).
   c. As a means of presentation, the student team could construct a tape slide show which would depict an overview of that particular job. As a supplement to the students report a representative from the selected career area could come speak before the class, a movie could be shown, or other aspects could be incorporated.

7. As a hands-on activity, each team could construct some type of display or object that would depict their chosen career area.

B. The same type of activity mentioned in A. above could be done using a group approach methodology.

1. With this method being employed, items 1, 2, 4, and 6 in A. above would be employed. In item A-6, an individual rather than a team would be doing the research and reporting function.

2. It is recommended that if the class size is eighteen or larger, divide it into two groups. If you have a two group setting within the same class, it is recommended that each group select a different size hypothetical town setting as described in A-2.

B. (cont.)

3. The type of hands-on construction activity to be used in conjunction with this approach would be the building of some type of display that would depict the community selected. Each member of the group would be responsible for a different phase of the construction activity as well as his report on the career area selected.

4. Using two different groups within the same class setting has a distinct advantage over a one group operation in that a very good discussion could be initiated on the similarity and differences of community needs of a large city as compared to a rural or smaller town setting.

The hypothetical community could be operated at any grade level by simply altering the degree of difficulty desired as an outcome of the program. This would also apply to ability levels within the same group.

C. In the second approach the following type of activity would be involved. This approach could also work at any grade or ability level depending upon the degree of emphasis placed upon the program.

1. Using either a line or mass production methodology, the emphasis would be placed on how people function and work together as they produce a single
K-6 object in a large quantity.

2. This approach involves itself with large volume production industries and all the problems related to that envolvement.

3. The class organizes a company with a management structure based on the management organizations of high-volume production industries.

4. Each member of the class then occupies one of the managerial and/or worker roles associated with their company and conducts a role playing activity by researching their counterpart, reporting to their fellow classmates and carrying out that role in their class activities.

5. Following the selection of an item for production, the class effort is directed towards the activities of designing the product, production line planning, designing and fabricating the jigs and fixtures necessary for the production of the object, and the training of personnel necessary to perform the various operations. Also, advertising, labor unions, negotiations, and other role playing and construction activities play a very important part in the project.

6. The financing aspect, or that of raising the necessary capital is a very significant part of the line production experience. This part of the program is accomplished through the issuance of stocks and other financing approaches.

7. Periodic staff meetings and special purpose meetings are held under the direction of an appropriate student department head. The staff meetings are led by the President of the company, meetings for safety instruction are held by the Safety Engineer, production planning meetings are held by the Project Director, etc. The meetings are designed to facilitate management planning and operation, smoother production, and a sharing of information.

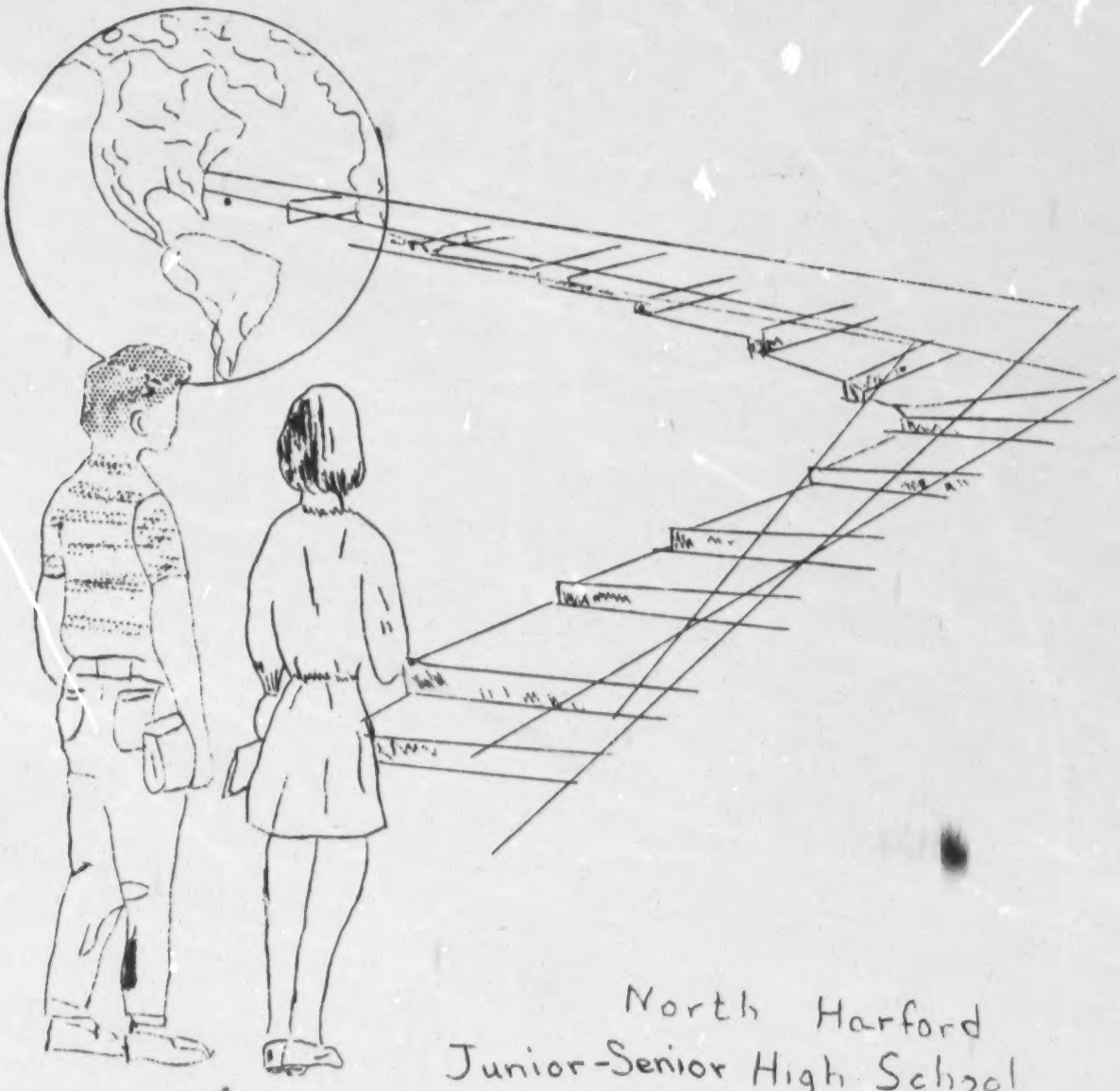
C. (cont.)

8. Films, guest speakers, field trips, and student reports are all a part of the line production method of instruction.

   This approach is not designed to get at all nine of the broad career areas but it does deal with a few of them and depending upon how the individual class gets involved, it could deal with more career areas than those that normally meet ones eye.

All of the above activities (A, B, & C) could be enhanced to a great extent if a team teaching situation could be employed or if other subject areas would involve themselves in these activities.

CAREER DEVELOPMENT



North Harford
Junior-Senior High School

Summer - 1971
M.S.D.E Career Development Project

CAREER EXPLORATION WORKSHOP

1971

North Harford Junior-Senior High School

Pylesville, Maryland 21132

William Pyle - Principal

Annetta Wright - Supervisor

Conference Participants

Lynda Quigg

Melvin Rogers

Shirley Runde

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North Harford Jr.-Sr. High School

Major Problem

A Task Force, currently composed of three members, assisted by the principal and supervisor, plans to develop a project in the area of career exploration.

This project will begin in 1971-1972 school year, to a limited extent, and will be further developed in the following school years. This first year's efforts will be limited by several factors: the reduction of the size of the Task Force to only three members, the heavy obligations within the school to prepare for a school evaluation, and the very crowded physical plant. All three limitations will be somewhat relieved by 1972-1973.

We do support the importance of attention to career development in the schools, at all ages, for all students. We believe that all school personnel should be involved in providing such opportunities and experiences. We accept that such training should be interdisciplinary and that it should be an integrated and relevant part of all curriculum areas rather than isolated units of studies at pre-determined ages or levels.

General Staff Objectives

1. To initiate a program of career exploration at the Junior High School level.

2. To establish a nucleus group of faculty members who will develop the initial program (71-72) and who will provide leadership in expansion for successive years.

3. To provide programs and experiences which will enable the total faculty to become informed, supportive, and active in projects in career exploration.

4. To incorporate this instruction within the regular curriculum.

5. To develop an evolving program which will become interdisciplinary - for all grades.

6. To involve total school personnel as participants and contributors to the program: professional staff, Board of Education members, teachers, students, and parents.

7. To advance the utilization of the total community as classroom, and to involve community members as participants and leaders.

8. To utilize this project as a pattern for improved relevancy and flexibility in the education of youth.

Objectives for North Harford Task Force

1. To acquire a comprehensive background of knowledge of the purposes, procedures and the provisions of the Maryland Career Development Project.

2. To gain understanding of the objectives which have been established for students.

3. To become well informed on the ways in which our individual school can provide effective career exploration for students.

4. To work with the school administration in preliminary planning for the development of a exploratory career project in the school.

5. To serve as leaders, resource persons and co-ordinators as the school develops its program of career exploration.

6. To maintain communication with the Maryland State Department of Education's Interdivisional Task Force on Career Development, in order to co-ordinate efforts, resources, and directions.

7. To endeavor to develop interest on the part of all departments and faculty members in providing career development training for students.

8. To promote parent and community support and participation in the project.

9. To maintain a continuous program of self-education in career education via reading, visits to schools, contracts with state and county departments, and cooperation with local business and industries.

Activities for Task Force and Faculty

1. The Task Force will inform the principal, assistant principals, supervisor, general curriculum committee and work-experience coordinator on the progress of the project.

2. The Task Force and school leaders (see #1 above) will consider plans of action, both long range and immediate.

3. The School Curriculum Committee will be provided with information. This group will provide assistance with the planning and will provide support for those who participate.

4. The leaders of the school will contact the Board of Education to propose steps of action, to gain necessary support, and to acquire necessary funds and approval.

5. The Task Force, school leaders and School Curriculum Committee will:
   a. study the school situation
   b. list possible actions
   c. establish priorities
   d. determine the program to be developed
   e. select teachers to recruit for participation
   f. inform and involve the community

6. The faculty, as a whole, or in other designated groups, will be provided with the background of information, the objectives, the proposed plan of action, and the opportunity to participate in whatever capacity individuals may express interest.

7. Resource persons to be utilized will include the following:

   a. State Department members
   b. School counselors
   c. County and Industrial Arts supervisor
   d. Directors of curriculum
   e. Lay members
   f. Parents
   g. Students
   h. Vo-tech personnel
   i. Pupil personnel representatives
   j. Department of Employment Security
   k. Work-experience coordinator
   l. Retired teachers

8. Regular and continuous meetings will be held to evaluate the program, to further develop the program and to plan extensions for successive years.

Objectives for Students

1. To have opportunities to participate in experiences which will enable students to gain knowledge and understanding of the world of work.

2. To guide students in the development of positive self-concepts and self-understanding.

3. To provide experiences and direction which will strengthen effective decision-making on the part of individuals.

4. To relate knowledge of the world of work to personal selection and preferences and to personal evaluation of all members of society.

5. To establish provisions for effectively relating school subjects to vocational knowledge, attitudes and skills.

6. To employ the material and personal resources of the school, the home, and the community in career education for students.

7. To provide programs and training for students which are pertinent to a world of work where rapid change necessitates behavioral adjustment and continuous learning.

Activities for Students

1. Efforts to provide career training would be concentrated in two groups:

    a. Eighth grades because all three team members will work with them.

    b. Teachers we predict who will be most willing to work with us will be teaching 8th grade classes (part of each day).

2. The eighth grade social studies program is in the citizenship area and vocational studies are suggested in the topics and activities.

3. Eighth grade will be making more definite schedule choices <u>three</u> times a year.

4. One period per day is devoted to exploratory courses such as Mechanical Drawing, Art, Home Economics, Agriculture, Music, Speech and Dramatics.

5. Some members from the class of 16-1 which is the oldest special education group, are admitted to vo-tech; some are graduated; and some are prone to leave and become employed. This teacher is one who will contribute effectively to such a project.

6. Utilize advertisement sections of newspapers (buy 30 copies, or prepare overhead overlays, dittos, etc.) to study:

    a. opportunities

    b. requirements such as age, training, size, etc.

7. Relate literature and reading selections to given work opportunities.

8. Visit places of work to observe, record, analyze, inquire and evaluate.

   a. general - gas station, supermarket, store, etc.

   b. specific - electrician, heavy equipment operator, etc.

9. Watch a film with pre-established purposes of determining tasks, requirements, etc.

10. Interview teachers for other jobs they have had to establish a pattern of work choices, to compare benefits, etc.

11. List occupations of all fathers of students in a given class. Let students record their opinions of the most difficult task of each. Then, by interview, gain knowledge of same.

12. Let students list ten people they know (bus driver, mailman, teacher, minister, plumber, 4-H leader, etc.) Have each list the trait and skill they believe contributes most to the success of each.

Example:	Work Skills	Personal Attributes
Mailman	Reading Math	Patience

13. A math class could select five occupations. By observation and/or by interview find how math contributes to each. Take a test or worksheet to a worker. Let the worker tell which items he had to know for his work in the past week.

14. Study student responses to 70-71 choices and work experiences with the student.

15. Study CR-2 cards to note choices and changes over the years.

16. Utilization of questionnaires.

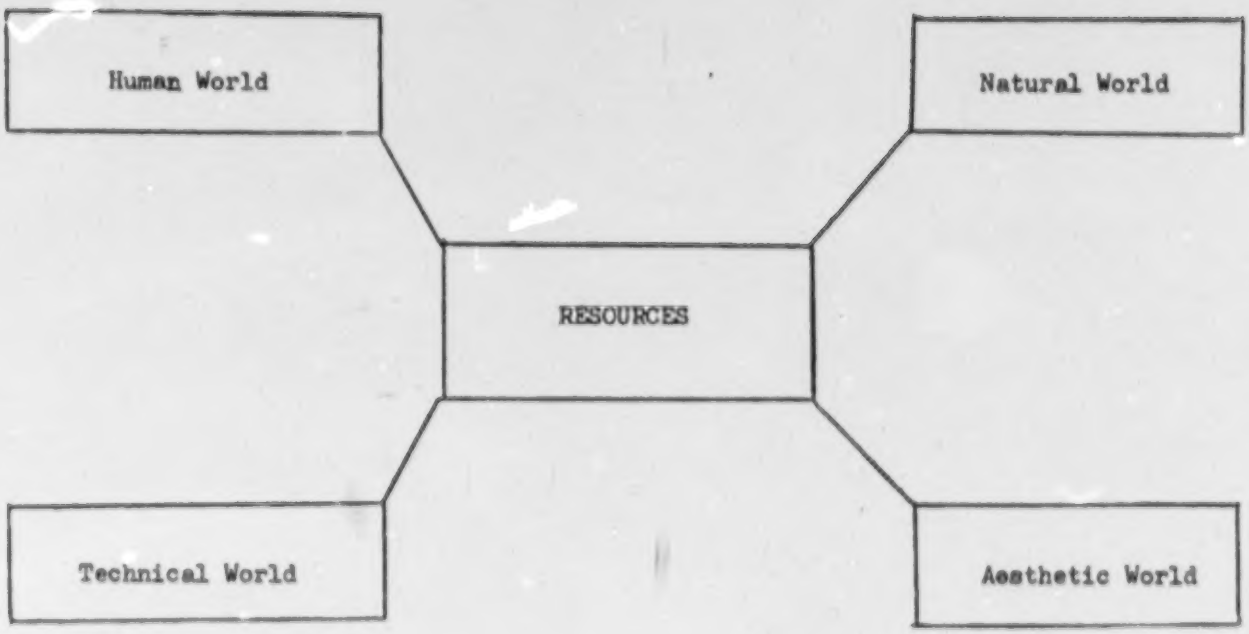
Evaluation

Evaluation of this program will be more informal than formal. To be considered in any evaluation will be total faculty, the teachers in the program, students in the program, community people and parents. Total faculty reactions will be measured by contributions of ideas, desire to participate, incidental or informal utilization of ideas in their classes.

Teachers involved directly in the project will reveal evaluation by expressed concerns or successes; by requests for materials, assistance and ideas; by self-directed extension of phases of the project; by indications of student behavior, interests, requests and decisions.

Students will indicate the effectiveness of the program by interest and enthusiasm, by directions they provide through questions, suggestions and requests; by what they discuss in out-of-class situations; by changes in independent reading. Community and parental interests will be revealed by questions, by offers of assistance, by reactions to activities which take students into the community.

The use of pre- and post-tests of facts or of attitudes will be one way to obtain some direct evaluation. Analysis or careful awareness of the individual students as they sign for schedules the next school year will be another. If the choices show more awareness of self and are more realistic about expectations--then there have been successes.


Human World
Natural World
RESOURCES
Technical World
Aesthetic World

Resources

I. Areas
- A. Human World
- B. Natural World
- C. Technological World
- D. Aesthetic World

II. People
- A. Members of State Department of Education
- B. Harford County Board of Education
  1. Mr. Halsey - Asst. Superintendent of Instruction
  2. Dr. Lightcap - Asst. Superintendent of Finances
  3. Mr. Bater - Director of Secondary Schools
  4. Mr. Snee - Supervisor of Pupil Personnel
  5. Mr. Hawk - Pupil Personnel Representative
  6. Special Area Supervisors:
- C. General Curriculum Committee
- D. State Curriculum Center
- E. Librarians (State, County and Local)
- F. County Film Library
- G. Community Leaders
- H. Total School Personnel
- I. Students
- J. Industrial and Business Personnel
- K. Harford Community College Personnel
- L. Harford County Vocational-Technical Center Personnel

III. Audio-Visual
- A. Films
- B. Film strips
- C. Overlays
- D. Cassettes
- E. Tapes
- F. Texts
- G. Pamphlets
- H. Catalogs
  1. SRA
  2. Guidance Associates
  3. Community Colleges
- I. I.T.V.
- J. Newspapers
- K. Advertisements
- L. Questionnaires
- M. Interest and Aptitude Tests

Budget

1. Postages, stationery, and other working supplies
2. Field trips
3. Substitutes to release teachers involved in Career Exploration
4. Public relations
5. Resource materials
6. Stipends for consultants